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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,390	10/22/2001	Reiner Gross	GR 00 P 19937	9813

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LERNER AND GREENBERG, P.A.
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EXAMINER

EASTHOM, KARL D

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/007,390	GROSS, REINER	
	Examiner	Art Unit	
	Karl D Easthom	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Weeks. Weeks discloses the claimed invention at Fig 1 with resistance zone 6, power supply leads 16, connections 14 or where 14 and 16 meet, and insulating layer depicted between 13 and 17. Thermal coupling exists inherently since the insulating layer is not a perfect thermal insulator. This statement applies to all the rejections below and will not be repeated for brevity. In claim 7, the protective barrier is the air between the resistor and shell 11. In claims 8-9, the connections could also be 21 or 14, where the dimension "correspond" by fitting together. In claims 10-11, manganin is disclosed at Fig. 4.

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Ting et al. Ting discloses the claimed invention at Fig 1 with resistance zone 3, power supply leads 11, 9, connections solder (col. 2, line 8), insulating layer 9, or 17. The dimensions "correspond" where the term is broad.

4. Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by McLaughlin. McLaughlin discloses the claimed invention at Fig 2 with resistance zone 2, power supply leads 3', parallel at Fig. 2 since it is a piece of metal, connections 8, (or leads 8 and connections 3'), or connections 4, or connection contacts 7, and insulating layer 1 between 3' and 8 with the connections designed as connection contacts 7. In claim 6, the leads are stacked. In claim 7, the barrier is 5, an enamel that is thermally nonconductive to a degree since it does

not allow air into the device which would otherwise conduct more heat, and where no material is totally nonconductive. German silver is an alloy. The connections correspond to the width and thickness where correspond does not mean equal.

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Mazzochette. Mazzochette discloses. Mazzochette discloses the claimed invention at Figs. 1-4 with resistance zone 36, busbars either 48, 50, or 42, 44, with connections the resistive portion where 42 and 44 meet 36, insulating layer 54 (being a good thermal conductor where it is hatched as plastic and good is a term of degree), or insulating layer 30 between busbars 42, 44, with ends of 48, 40 designed as power supply leads which is the end of a coaxial cable. In claim 4, the twisted pair disclosed at col. 3, line 18 is interpreted as intermeshed, where the term is construed broadly. The dimensions "correspond" where the term does not mean equal.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as anticipated by Smith, Jr. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith in view of Zandman. Smith discloses the claimed invention at Fig 8 with resistance zone 22, power supply leads 26', 27', connections 15, 20 or the bonding described (col. 4, lines 45-55), and insulating layer 54. The resistor 22 is a metal film disclosed at col. 2, lines 1-20 55-70 as the metal film of Zandman, which is described as an alloy of nichrome at col. 2. As the 35 USC 103 alternative, it would have been obvious to use the same film where it is described as having advantages as noted such

as a small temperature coefficient of resistivity at col. 1. In claims 2-3, the other insulating layer is 51, and the conductive layer is 52. In claim 6, the leads are stacked when the device is on its side. In claim 7, the barrier is the air between 52 and 51 with ambient and the resistor adjacent parts producing heat or cold. Or in claim 7, the thin layer of TEFLON described at col. 4, lines 55-65 is the barrier. Thermal coupling exists inherently since the material 54 is not a perfect thermal insulator. This statement applies to all the rejections below and will not be repeated for brevity. In claims 8-9, the connections have dimension that correspond where the term is construed broadly without necessarily meaning equal. (For claim 8, the alternative 35 USC 103 rejection is not required where no alloy is claimed, but claim 8 is here grouped with claim 9 all other elements being similar or the same)

8. Claims 1, 4-5, 7, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazochette in view of Ogren. Mazochette discloses except the alloy (manganin) the claimed invention at Figs. 1-4 with resistance zone 36, coaxial leads 48, 50, insulating layer 54 (being a good thermal conductor where it is hatched as plastic and good is a term of degree), with ends of 48, 40 designed as power supply leads which is the end of a coaxial cable. In claim 4, the twisted pair disclosed at col. 3, line 18 is interpreted as intermeshed, where the term is construed broadly. Ogren discloses the alloy manganin as a prior art resistor having good conductivity over a narrow temperature range (see col. 1), with other alloys having broader temperature ranges good for small compact resistors (see col. 2) such as that of Mazzochette, so that it would have been obvious to employ known alloys for resistors where metal films disclosed by Mazzochette are but one type of metal alloys, with films being alloys, where the alloys can be employed depending on the temperature range of interest.

9. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Ogren. Smith Jr discloses the invention as noted above except the alloy manganin. Ogren discloses the alloy manganin as a prior art resistor having good conductivity over a narrow temperature range (see col. 1), with other alloys having broader temperature ranges good for small compact resistors (see col. 2) such as that of Smith, so that it would have been obvious to employ known alloys for resistors where metal films disclosed are but one type of metal alloys, with films being alloys, where the alloys can be employed depending on the temperature range of interest.

10. Applicant's arguments filed 8/22/03 have been fully considered but they are moot or not persuasive in full. Applicant argues that McLaughlin does not disclose an alloy. This is not correct as German silver is a nickel silver. Applicant points to his applicant as a measuring resistor. This is not material to the claims. The connections No insulating layer is a perfect thermal decoupler so that some thermal coupling exists for the layers noted above, and of course, the electrical insulators insulate electrically. Smith discloses or suggests the metal alloy as noted above. That the connections correspond to the dimensions of the busbars is met where "correspond" does not necessarily mean equal, nor is it too clear what is meant.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


KARL D. EASTHOM
PRIMARY EXAMINER